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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,558	03/29/2001	R. Craig Klem	17732-2919000	5864

7590 12/04/2003

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EXAMINER

MASON, DONNA K

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,558

Applicant(s)

KLEM ET AL.

Examiner

Donna K. Mason

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The use of the trademark COMPACTPCI has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-14, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,821,146 to Behrens, et al. ("Behrens") in view of *COMPACTPCI Specification Short Form* by PCI Industrial Computers Manufacturing Group ("PICMG").

Behrens discloses a backplane system (Fig. 1) to connect in common a plurality of peripheral computing devices (column 5, lines 54-56) on an individual daughter card (Fig. 1, item 60; column 4, lines 1-6) such that there is a corresponding number of

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daughter cards, where the daughter cards each have a slot connector (column 4, lines 1-6), the backplane system including: a backplane bus having a plurality of slots (Fig. 1a, item 1) for receiving one or more of the cards, each slot including a card connector, and an interposer card (Fig. 1, item 20) for each daughter card, the interposer card including means to connect to the slot connector and the card connector such that the interposer card is interposed between the daughter card and a slot of the plurality of slots of the backplane bus (Fig. 1, items 21 and 61), wherein said interposer card is designed to convert reflective wave of the daughter card into incident wave switching at the slot connector.

Behrens does not expressly disclose the backplane system where the daughter cards are configured as COMPACTPCI-compliant cards, and the slots are spaced from one another at a pitch to minimize impedance mismatching.

PICMG discloses the system where COMPACTPCI-compliant cards are used (page 2, column 2, lines 1-18), and the slots are spaced from one another to minimize impedance mismatching (page 3, column 1, lines 1-4). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the COMPACTPCI system of PICMG with Behrens. The suggestion or motivation for doing so would have been to obtain a system suited for industrial and/or embedded applications, which would require a more robust mechanical form factor than a desktop PCI.

Therefore, it would have been obvious to combine PICMG with Behrens to obtain the invention as specified in claims 1-4, 6-14, and 16-20.

4. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behrens in view of PICMG, as applied to claims 1 and 11 above, and further in view of U.S. Patent No. 6,265,914 to Randhawa.

As described above, Behrens in view of PICMG discloses all the features of independent claims 1 and 11. Behrens in view of PICMG does not expressly disclose the system where the interposer card includes a GTLP transceiver to produce incident wave switching.

Randhawa discloses a GTLP transceiver to produce incident wave switching (column 4, lines 46-57). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the GTLP transceiver of Randhawa with Behrens and PICMG. The suggestion or motivation for doing so would have been to eliminate reflection waves (column 1, lines 8-26).

Therefore, it would have been obvious to combine Randhawa with Behrens and PICMG to obtain the invention as specified in claims 5 and 15.

### ***Conclusion***

5. A shortened statutory period for reply is set to expire THREE MONTHS from the mailing date of this communication. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this communication.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna K. Mason whose telephone number is (703) 305-1887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H. Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

DKM

  
XUAN M. THAI  
PRIMARY EXAMINER  
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